rather, "dimethylbenzanthracetate (DMBA) dissolved in 0.1 ml of acetone, ... [an] initiator" and "12-0-tetradecanoylphobol, ... [a] tumor promoter" were applied to the skin (page 1592, fourth paragraph). These topical applications were applied "four weeks after the onset of the diets . . . [of] soybean milk." (emphasis added) Therefore, Applicant's topical use of soybean milk was not taught by Limtrakl, who taught a diet of soybean milk. Applicant respectfully asserts that this rejection has been overcome.

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## Kosaka U.S. Patent No. 4,477,434 ("Kosaka")

The Examiner rejected claims 24, 28 to 36, 38, 40, 44 to 47 and 58 under 35 U.S.C. § 102(b) as being anticipated by Kosaka. Applicant traverses this rejection for at least the following reasons.

Kosaka does not teach a method of decreasing phagocytosis or ICAM-1 expression in a mammalian cell, which is claimed in claim 24 of the pending application, for example. Kosaka teaches "treatment of various diseases of the circulatory system and the digestive system," (Col. 1, Lines 43-45) with papain and citric acid. Thus, the present invention is distinguished on at least two counts.

First, the present invention decreases phagocytosis or ICAM-1 expression, which occurs in the immune system and the dermatological system, not the circulatory and digestive systems. Second, Applicant teaches use of "an agent that specifically decreases phagocytosis or ICAM-1 expression," and specifically, "a soybean derivative (or) a serine protease inhibitor." Papain, which is required by Kosaka, is not an agent that decreases phagocytosis or ICAM-1 expression, nor a serine protease inhibitor, and is actually a serine protease. See Vernet T, et al., Structural and Functional Roles of Asparagine 175 in the Cysteine Protease Papain, J. Biol. Chem. 270: 28,



16645-52, July 14, 1995, and Schirmeister T, New Peptidic Cysteine Protease Inhibitors Derived from the Electrophilic Alpha-amino Acid Aziridine-2,3-dicarboxylic acid, J. Med. Chem., 42: 4, 560-72, Feb. 25, 1999 (copies attached hereto as Exhibits A and B). Kosaka's use of a serine

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Therefore, since Kosaka teaches away from the present invention and does not anticipate the claims, Applicant respectfully asserts that this rejection has been overcome.

protease, papain, teaches away from the present invention's use of serine protease inhibitors.

Katsumi JP 62036304 ("Katsumi")

The Examiner rejected claims 24, 28 to 36, 38, 40, 44 to 47 and 58 under 35 U.S.C. § 102(b) as being anticipated by Katsumi. Applicant traverses this rejection for at least the following reasons.

Katsumi teaches the use of soybean milk, which was originally used for consumption, as a topical application. Soybean milk (as used in Katsumi) can be treated with salt and heat to yield "cheese-like tofu," and such soybean milk was consumed prior to Katsumi, who recognized its use topically. See Katsumi, page 2. However, soybean milk, which has been processed for consumption such as that in Katsumi, has the STI and BBI activity eliminated, since these proteins inhibit digestion and result in diarrhea (see Declaration of Katharine Martin, paragraph 4 and 6, submitted with the previous response and a copy of which is attached hereto as Exhibit C). The present invention requires that STI and BBI activity be retained and non-denatured (see Declaration of Katharine Martin, paragraph 3), which would prevent the consumption of the composition used in the present invention. Therefore, Applicant respectfully asserts that this rejection is overcome.

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## CONCLUSION

Applicant respectfully asserts that the application is in condition for allowance.

Reconsideration and the early issuance of a Notice of Allowance are requested. If the Examiner has any outstanding issues, the courtesy of a phonecall is requested.

## Authorization of Deposit Account

The Commissioner is hereby authorized to charge any fees or credit any overpayment, to Deposit Account 18-0586. This authorization also hereby includes a request for any extensions of time of the appropriate length required upon the filing of any reply during the entire prosecution of this application.

I hereby certify that this paper and the papers referred to herein as being transmitted, submitted, or enclosed herewith for application Serial No. 09/206,249 is/are being facsimile transmitted to the United States Patent and Trademark Office fax number 703-872-9306 on the date shown below.

Manuallen Esshery

October 8, 2002

Date of Facsimile Transmission

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